

Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) A method for the preparation of pharmaceutical preparations for the inhibition of the proliferation (DNA synthesis) of human sebaceous cells comprising utilization of inhibitors of dipeptidylpeptidase IV (DP IV) as well as of inhibitors of enzymes having a similar substrate specificity (DP IV-analogous enzyme activity) and/or of inhibitors of alanyl aminopeptidase (aminopeptidase N, APN) as well as of inhibitors of enzymes having a similar substrate specificity (APN-analogous enzyme activity) for the preparation of the pharmaceutical preparations for the inhibition of the proliferation (DNA synthesis) of human sebaceous cells.
2. (Withdrawn) The method according to claim 1, wherein the inhibitors of DP IV are selected from Xaa-Pro-dipeptides (Xaa = α -amino acid or side-chain protected derivative), corresponding derivatives, preferably dipeptide phosphonic acid diaryl esters and their salts, dipeptide boronic acids (e.g. Pro-boro-Pro) and their salts, Xaa-Xaa-(Trp)-Pro-(Xaa)_n peptides (Xaa = α -amino acid, n = 0 to 10), corresponding derivatives and their salts, amino acid (Xaa) amides, corresponding derivatives and their salts, wherein Xaa is an α -amino acid or a side chain-protected derivative, preferably N^ε-4-nitrobenzyl oxycarbonyl-L-lysine, L-isoleucine, L-valine, L-tryptophane, L-proline, and cyclic amines as, for example, pyrrolidine, piperidine, thiazolidine and their derivatives act as the amide structure, tryptophane-1,2,3,4-tetrahydroisochinoline-3-carboxylic acid derivatives (TSL) and/or (2S,2S',2S'')-2-[2'-(2''-amino-3'''-(indol-3'''-yl)-1''-oxoprolyl)-1',2',3',4'-tetrahydro-6'8'-dihydroxy-7-methoxyisochinol-3-yl-carbonyl-amino]-4-hydromethyl-5-hydropentanoic acid (TMC-2A).
3. (Withdrawn) The method according to claim 1, wherein amino acid amides are used as DP IV inhibitors, preferably N^ε-4-nitrobenzyl-oxycarbonyl-L-lysine thiazolidide, pyrrolidide and piperidide as well as the corresponding 2-cyano thiazolidide, 2-cyano pyrrolidide and 2-cyano piperidide derivative.

4. (Withdrawn) The method according to claim 1, wherein actinonin, leuhistin, phebestin, amastatin, bestatin, probestin, β -aminothiols, α -aminophosphinic acids, α -amino phosphinic acid derivatives, preferably D-Phe- ψ -[PO(OH)-CH₂]-Phe-Phe, and their salts act as inhibitors of APN.

5. (Withdrawn) The method of utilizing inhibitor combinations according to ~~any of~~ claims 1 for manufacturing pharmaceutical preparations for a prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomas, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

6. (Currently amended) A method for inhibition of the proliferation (~~DNA systems synthesis~~) of human sebaceous cells in an individual in need of treatment for benign follicular hyperproliferation conditions and/or malign follicular hyperproliferation conditions comprising ~~utilizing~~ administering to the individual a composition comprising inhibitors of dipeptidylpeptidase IV (DP IV) as well as of inhibitors of enzymes having a similar substrate specificity (DP IV-analogous enzyme activity) and/or of inhibitors of alanyl aminopeptidase (aminopeptidase N, APN) as well as of inhibitors of enzymes having a similar substrate specificity (APN-analogous enzyme activity) for the ~~inhabitation~~ inhibition of the proliferation (DNA synthesis) of human sebaceous cells.

7. (Currently amended) The method according to claim 6, wherein the inhibitors of the DP IV are selected from Xaa-Pro-dipeptides (Xaa - α -amino acid or side-chain protected derivative), corresponding derivatives, preferably dipeptide phosphonic acid diaryl esters and their salts, dipeptide boronic acids (e.g. Pro-boro-Pro) and their salts, Xaa-Xaa-(Trp)-Pro-(Xaa)_n peptides (Xaa = α -amino acid, n = 0 to 10), corresponding derivatives and their salts, amino acid (Xaa) amides, corresponding derivatives and their salts, wherein Xaa is an α -amino acid or a side chain-protected derivative, preferably N⁶-4-nitrobenzyloxy carbonyl-L-lysine, L-isoleucine, L-valine, ~~L-tryptophane~~, L-tryptophan, L-proline, and cyclic amines, for example pyrrolidine, piperidine, thiazolidine and their derivatives act as the amide structure, tryptophane-1,2,3,4-

tetrahydroisochinoline-3-carboxylic acid derivatives (TSL) and/or (2S,2S',2S'')-2-[2'-(2''-amino-3''-(indol-3'''-yl)-1''-oxopropyl)-1',2'3,4'-tetrahydro-6'8'-dihydroxy-7-methoxyisochinol-3-yl-carbonyl-amino]-4-hydromethyl-5-hydropentanoic acid (TMC-2A).

8. (Original) The method according to claim 6, wherein amino acid amides are used as DP IV inhibitors, preferably N^E-4-nitrobenzyl-oxycarbonyl-L-lysine thiazolidide, pyrrolidide and piperidide as well as the corresponding 2-cyano thiazolidide, 2-cyano pyrrolidide and 2-cyano piperidide derivative.

9. (Withdrawn) The method according to claim 6, wherein actinonin, leuhistin, phebestin, amastatin, bestatin, probestin, β -aminothiols, α -aminophosphinic acids, α -amino phosphinic acid derivatives, preferably D-Phe- ψ [PO(OH)-CH₂]-Phe-Phe, and their salts act as inhibitors of APN.

10. (Currently amended) The method ~~of utilizing inhibitor combinations according to of claim 6 for a prevention and~~ wherein the administering the composition results in therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

11. (Currently amended) A process for the inhibition of the proliferation (DNS synthesis) of human sebaceous cells (sebocytes) including the singular or the repeated administration of a pharmaceutical preparation to a patient with the corresponding disease pattern, comprising the administration to the patient of inhibitors of dipeptidylpeptidase IV (DP IV) as well as of inhibitors of enzymes having a similar substrate specificity (DP IV-analogous enzyme activity) and/or of inhibitors of alanyl aminopeptidase (aminopeptidase N, APN) as well as of inhibitors of enzymes having a similar substrate specificity (APN-analogous enzyme activity).

12. (Original) Process according to claim 11, wherein the inhibitors of the DP IV are selected from Xaa-Pro-dipeptides (Xaa = α -amino acid or side-chain protected derivative), corresponding derivatives, preferably dipeptide phosphonic acid diaryl esters and their salts, dipeptide boronic acids (e.g. Pro-boro-Pro) and their salts, Xaa-Xaa-(Trp)-Pro-(Xaa)_n peptides

(Xaa = α -amino acid, n = 0 to 10), corresponding derivatives and their salts, amino acid (Xaa) amides, corresponding derivatives and their salts, wherein Xaa is an α -amino acid or a side chain-protected derivative, preferably N^ε-4-nitrobenzyloxy carbonyl-L-lysine, L-isoleucine, L-valine, L-tryptophane, L-pro-line, and cyclic amines, for example pyrrolidine, piperidine, thiazolidine and their derivatives act as the amide structure, tryptophane-1,2,3,4-tetrahydroisochinoline-3-carboxylic acid derivatives (TSL) and/or (2S,2S',2S'')-2-[2'-(2''-amino-3''-(indol-3'''-yl)-1''-oxopropyl)-1',2',3',4'-tetrahydro-6'8'-dihydroxy-7-methoxyisochinol-3-yl-carbonyl-amino]-4-hydromethyl-5-hydropentanoic acid (TMC-2A).

13. (Original) Process according to claim 11, wherein amino acid amides are used as DP IV inhibitors, preferably N^ε-4-nitrobenzyl-oxycarbonyl-L-lysine thiazolidide, pyrrolidide and piperidide as well as the corresponding 2-cyano thiazolidide, 2-cyano pyrrolidide and 2-cyano piperidide derivative.

14. (Withdrawn) Process according to claim 11, wherein actinonin, leuhistin, phebestin, amastatin, bestatin, probestin, β -aminothiols, α -aminophosphinic acids, α -amino phosphinic acid derivatives, preferably D-Phe- ψ [PO(OH)-CH₂]-Phe-Phe, and their salts act as inhibitors of APN.

15. (Currently amended) Process according to claim 11 for ~~the prevention and~~ therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair, SAHA-syndrom [seborrhoe, acne, hirsutism, alopecia]) and malign hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA) on patients including the singular or the repeated administration of a pharmaceutical preparation with one or more inhibitor(s) of DP IV and/or APN.

16. (Withdrawn) Pharmaceutical preparations, comprising inhibitors of dipeptidylpeptidase IV (DP IV) as well as of inhibitors of enzymes having a similar substrate specificity (DP IV-analogous enzyme activity) and/or of inhibitors of alanyl aminopeptidase (aminopeptidase N, APN) as well as of inhibitors of enzymes having a similar substrate specificity (APN-analogous enzyme activity) in combination with per se known carrier substances, additives and/or auxiliary substances.

17. (Withdrawn) Pharmaceutical preparation according to claim 16, comprising Xaa-Pro-dipeptides (Xaa = α -amino acid or side-chain protected derivatives), corresponding derivatives, preferably dipeptide phosphonic acid diaryl esters and their salts, dipeptide boronic acids (e.g. Pro-boro-Pro) and their salts, Xaa-Xaa-(Trp)-Pro-(Xaa)_n peptides (Xaa = α -amino acid, n = 0 to 10), corresponding derivatives and their salts, amino acid (Xaa) amides, corresponding derivatives and their salts, wherein Xaa is an α -amino acid or a side chain-protected derivative, preferably N^ε-4-nitrobenzyloxycarbonyl-L-lysine, L-isoleucine, L-valine, L-tryptophane, L-proline, and cyclic amines, for example pyrrolidine, piperidine, thiazolidine and their derivatives act as the amide structure, tryptophane-1,2,3,4-tetrahydroisochinolinc-3-carboxylic acid derivatives (TSL) and/or (2S,2S',2S'')-2-[2'-[2''-amino-3'''-(indol-3'''-yl)-1''-oxopropyl]-1',2',3',4'-tetrahydro-6'8'-dihydroxy-7-methoxyisochinol-3-yl-carbonyl-amino]-4-hydromethyl-5-hydropentanoic acid (TMC-2A) as the inhibitors of the DP IV.
18. (Withdrawn) Pharmaceutical preparation according to claim 16, comprising amino acid amides, e.g. N^ε-4-nitrobenzyl-oxycarbonyl-L-lysine thiazolidide, pyrrolidide and piperidide as well as the corresponding 2-cyano thiazolidide, 2-cyano pyrrolidide and 2-cyano piperidide derivative as the inhibitors of the DP IV.
19. (Withdrawn) Pharmaceutical preparation according to claim 16, comprising actinonin, leuhistin, phebestin, amastatin, bestatin, probestin, β -aminothiols, α -aminophosphinic acids, α -amino phosphinic acid derivatives, preferably D-Phe- ψ [PO(OH)-CH₂]-Phe-Phe, and their salts as inhibitors of the APN.
20. (Withdrawn) Pharmaceutical preparation according to claim 16 comprising two or more of the inhibitors of DP IV or inhibitors of enzymes having a DP IV-analogous enzyme activity and/or inhibitors of APN or inhibitors of enzymes having an APN-analogous enzyme activity, in a spaced-apart formulation in combination with per se known carrier substances, additives and/or auxiliary substances for a simultaneous or, with respect to time, immediately successive administration with the aim of a joint effect.
21. (Withdrawn) Pharmaceutical preparation according to claim 16 for a systemic administration for an oral, transdermal, intravenous, subcutaneous, intracutaneous,

intramuscular, rectal, vaginal, sublingual application together with per se known carrier substances, additives and/or auxiliary substances.

22. (Withdrawn) Pharmaceutical preparation according to claim 16 for a topical administration in the form of cremes, ointments, pastes, gels, solutions, sprays, liposomes or nansomes, agitated mixtures, hydrocolloid dressings, and other dermatological bases/vehicles including instillative application.

23. (Withdrawn) The method of utilizing inhibitor combinations according to claim 2 for manufacturing pharmaceutical preparations for a prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

24. (Withdrawn) The method of utilizing inhibitor combinations according to claim 3 for manufacturing pharmaceutical preparations for a prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

25. (Withdrawn) The method of utilizing inhibitor combinations according to claim 4 for manufacturing pharmaceutical preparations for a prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

26. (Currently amended) The method of utilizing inhibitor combinations according to claim 7 for ~~a prevention and~~ therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

27. (Currently amended) The method of utilizing inhibitor combinations according to claim 8 for ~~a prevention and~~ therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

28. (Withdrawn) The method of utilizing inhibitor combinations according to claim 9 for a prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair), SAHA syndrome [seborrhea, acne, hirsutism, alopecia] and malign follicular hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA).

29. (Currently amended) Process according to claim 12, for ~~the prevention and~~ therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair, SAHA-syndrom [seborrhoe, acne, hirsutism, alopecia]) and malign hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA) on patients including the singular or the repeated administration of a pharmaceutical preparation with one or more inhibitor(s) of DP IV and/or APN.

30. (Currently amended) Process according to claim 13, for the prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair, SAHA-syndrom [seborrhoe, acne, hirsutism, alopecia]) and malign hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA) on patients including the singular or the repeated administration of a pharmaceutical preparation with one or more inhibitor(s) of DP IV and/or APN.

31. (Withdrawn) Process according to claim 14, for the prevention and therapy of both benign follicular hyperproliferation conditions (acne, acneiform follicular reactions, steatocystoma multiplex, naevi of sebaceous glands, senile sebaceous gland hypertrophy, seborrhea of the skin and of the hair, SAHA-syndrom [seborrhoe, acne, hirsutism, alopecia]) and malign hyperproliferation conditions (mixed tumors, sebaceomes, naevus sebaceous with malign development, sebaceous gland tumors, sebaceous gland CA) on patients including the singular or the repeated administration of a pharmaceutical preparation with one or more inhibitor(s) of DP IV and/or APN.

32. (Withdrawn) Pharmaceutical preparation according to claim 17, comprising two or more of the inhibitors of DP IV or inhibitors of enzymes having a DP IV-analogous enzyme activity and/or inhibitors of APN or inhibitors of enzymes having an APN-analogous enzyme activity, in a spaced-apart formulation in combination with per se known carrier substances, additives and/or auxiliary substances for a simultaneous or, with respect to time, immediately successive administration with the aim of a joint effect.

33. (Withdrawn) Pharmaceutical preparation according to claim 18, comprising two or more of the inhibitors of DP IV or inhibitors of enzymes having a DP IV-analogous enzyme activity and/or inhibitors of APN or inhibitors of enzymes having an APN-analogous enzyme activity, in a spaced-apart formulation in combination with per se known carrier substances, additives and/or auxiliary substances for a simultaneous or, with respect to time, immediately successive administration with the aim of a joint effect.

34. (Withdrawn) Pharmaceutical preparation according to claim 19, comprising two or more of the inhibitors of DP IV or inhibitors of enzymes having a DP IV-analogous enzyme activity and/or inhibitors of APN or inhibitors of enzymes having an APN-analogous enzyme activity, in a spaced-apart formulation in combination with per se known carrier substances, additives and/or auxiliary substances for a simultaneous or, with respect to time, immediately successive administration with the aim of a joint effect.
35. (Withdrawn) Pharmaceutical preparation according to claim 17 for a systemic administration for an oral, transdermal, intravenous, subcutaneous, intracutaneous, intramuscular, rectal, vaginal, sublingual application together with per se known carrier substances, additives and/or auxiliary substances.
36. (Withdrawn) Pharmaceutical preparation according to claim 18 for a systemic administration for an oral, transdermal, intravenous, subcutaneous, intracutaneous, intramuscular, rectal, vaginal, sublingual application together with per se known carrier substances, additives and/or auxiliary substances.
37. (Withdrawn) Pharmaceutical preparation according to claim 19 for a systemic administration for an oral, transdermal, intravenous, subcutaneous, intracutaneous, intramuscular, rectal, vaginal, sublingual application together with per se known carrier substances, additives and/or auxiliary substances.
38. (Withdrawn) Pharmaceutical preparation according to claim 20 for a systemic administration for an oral, transdermal, intravenous, subcutaneous, intracutaneous, intramuscular, rectal, vaginal, sublingual application together with per se known carrier substances, additives and/or auxiliary substances.
39. (Withdrawn) Pharmaceutical preparation according to claim 17 for a topical administration in the form of cremes, ointments, pastes, gels, solutions, sprays, liposomes or nansomes, agitated mixtures, hydrocolloid dressings, and other dermatological bases/vehicles including instillative application.
40. (Withdrawn) Pharmaceutical preparation according to claim 18 for a topical administration in the form of cremes, ointments, pastes, gels, solutions, sprays, liposomes or

nansomes, agitated mixtures, hydrocolloid dressings, and other dermatological bases/vehicles including instillative application.

41. (Withdrawn) Pharmaceutical preparation according to claim 19 for a topical administration in the form of cremes, ointments, pastes, gels, solutions, sprays, liposomes or nansomes, agitated mixtures, hydrocolloid dressings, and other dermatological bases/vehicles including instillative application.

42. (Withdrawn) Pharmaceutical preparation according to claim 20 for a topical administration in the form of cremes, ointments, pastes, gels, solutions, sprays, liposomes or nansomes, agitated mixtures, hydrocolloid dressings, and other dermatological bases/vehicles including instillative application.